



THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

January - March 2008

Issue No: 1/2008

Honouring Victor Quesnel

L.W. Doodnath

At the recent Christmas Luncheon held on Sunday December 9, 2007 at the Mariposa Restaurant in Lopinot Dr. Victor Quesnel was presented with a laminated copy of the frontispiece map extracted from *The Vegetation of Trinidad and Tobago* written by J.S. Beard. The presentation was made by Lester Doodnath on behalf of the Botany Group for Dr. Quesnel's contribution to and enthusiastic sharing of knowledge with the Botany Group and Club over many years.

The rare map was reproduced from one of the few copies of the book available at the West Indiana Section of the University of the West Indies, St. Augustine.

Victor Quesnel studied biochemistry at the University of Toronto and received his doctorate from the University of Cambridge. He researched cocoa fermentation during his career and has been an active member of the TTFNC and the Botany Group for many years. As one of the Clubs oldest members he is always available and willing to share of his time, experience and wealth of knowledge with members.



Victor Quesnel (left) is presented with the laminated map copy by Lester W. Doodnath
(Photo courtesy L.W. Doodnath)



Louis Guy (from left), Shane Ballah, Victor Quesnel and Reg Potter peruse the map after lunch
(Photo courtesy L.W. Doodnath)

Your 2008 Annual Membership fees are Due

Please view bottom right of the mailing label to check if your subscription has been paid

Inside This Issue

- 1 **Cover**
Recognising Victor Quesnel,
Lester W. Doodnath
- 2 **Editor's Note**
- 3 **Book Review**
The Remarkable Life of William Beebe:
Explorer and Naturalist, *Carol Grant Gould*
- 4 **Club Field Trips - Birding**
Paramin - *Feroze Omardeen*
- 5 Morne Bleu - *Mat Kelly*
- 7 **Nature Note**
Why are their Iguanas?, *Christopher K. Starr*
- 8 **Club Field Trips - Botany**
North Manzanilla - *L.W. Doodnath*
- 13 **Feature**
Exotic Vertebrate Species in Trinidad and
Tobago - *Hans Boos*
- 16 Montserrat: A Naturalists Surprise
Reynold C. Boyce
- 19 **Management Notices**
- 20 **Notes to Contributors**

Editor's Note

I must apologise for the poor quality of the photos and dead space in our last issue. A lack of proper communication between myself and the printers appears to have been the culprit. The response to my request for articles and their timely submission has been positive and I encourage all to continue. I acknowledge the many positive critiques I've received on the last issues (thanks). To settle the search for an editor I've indicated to Management my willingness to continue on in this capacity.
STB

THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

January - March 2008

Editor

Shane T. Ballah

Contributing writers

Hans Boos, Reynold Boyce, Lester W. Doodnath, Carol Grant Gould, Matt Kelly, Feroze Omardeen, Christopher K. Starr

Photographs

Shane T. Ballah, Reynold Boyce, Kester Dass, Lester W. Doodnath,

Design and Layout

Shane T. Ballah

The Trinidad and Tobago Field Naturalists' Club is a non-profit, non-governmental organisation

Management Committee 2008

President	Reginald Potter	694-1160
Vice-President	Carrall Alexander	633-3373
Secretary	Shane T. Ballah	796-3335
Assist-Secretary	Paul Budgen	484-0373
Treasurer	Selwyn Gomes	624-8017
Committee members ...	Dan Jaggernauth	659-2795
	Alyssa Gomes	799-4087
	Palaash Narse	751-3672

Contact us!

Website: <http://www.wow.net/ttfnc>
Postal: The Secretary, TTFNC, c/o P.O. Box 642, Port-of-Spain, Trinidad and Tobago
Email: ttfnc@wow.net

Disclaimer:

The views expressed in this bulletin are those of the respective authors and do not necessarily reflect the opinion and views of the Trinidad and Tobago Field Naturalists' Club

The Remarkable Life of William Beebe: Explorer and Naturalist,*Book review*

Carol Grant Gould

Island Press, Washington, DC ISBN 1559638583. 447 pp., illus. US\$30

Daring explorer, cutting-edge naturalist, and brilliant author of two dozen books, William Beebe was famous worldwide in his day. His popular radio broadcasts, which in 1932 included the first live broadcast from deep below the surface of the ocean, and his magazine articles and steady stream of adventure books, brought him well deserved fame. His fans looked forward eagerly to his next thrilling, information-packed narrative.

Beebe's explorations took him where no man had gone before – from the inky depths of the ocean in the bathyscaphe, which he co-designed, to the heart of Himalayan and Malaysian forests. Always observant and incredibly patient, Beebe had a knack for knowing what to look for and how to see beyond the obvious. His studies covered most major organisms, but he had a strong penchant for birds and often discovered behaviors previously unknown or overlooked by ornithologists.

Born in Brooklyn in 1877, Beebe began his career as a curator with the New York Zoological Society, which sent him on collecting missions overseas. He maintained a lifelong relationship with the Bronx Zoo, returning from his travels with countless strange creatures for exhibition. Equally at ease in high society and primitive cultures, he never lacked funding for his explorations. He was close friends with Theodore Roosevelt and a mentor to Rachel Carson. He was similarly at home in New York City as well as at his field stations in Bermuda, British Guiana, and Trinidad. His chatty writing style made his scholarly four-volume *Monograph of the Pheasants* as accessible to the lay person as his articles in *National Geographic*.

A revolutionary scientific method that Beebe

used was to examine and list all of the organisms found in a single bounded area. In one instance the area was a vertical column of seawater. In another it was a tract of Guianan riverside forest. His method yielded valuable new information not only about the distribution of organisms but about how they interacted with each other and their environment.

Late in life Beebe grew increasingly concerned about the destruction of habitats in which he had conducted his groundbreaking studies. By the time of his death in 1962 the only such areas that remained intact were the ocean depths and Simla, a research station he had established in Trinidad's Arima Valley. Were he alive today he would be gratified to learn that, in part because of new ways he taught biologists to view life, Simla and the Arima Valley rainforest are still doing well.

Gould successfully captures the essence of this extraordinarily charismatic pioneer of investigative natural history. She received exclusive access to Beebe's personal journals and correspondence from 1887 to 1962, which enabled her to craft a fascinatingly complete biography. She presents the details of his first wife's betrayal and divorce, his love affairs, and his chronic pulmonary problems as being far less important than his lifelong quest for a deep understanding of the inner workings of nature. More than anything else, she accurately portrays Beebe as one of the first truly great ecologists.



Paramin - October 14, 2007

Feroze Omardeen

Birding Trip



“These blasted birds” Kay Hinkson had said on the phone, “I can’t get even one plum from the tree.”

She was discussing the birds off her balcony in Paramin. Personally relieved that our group leader was showing more interest in a frugivorous diet, I agreed to be at the Maracas pillars meeting point for 6.30 a.m.

The annual Paramin trip is really a good excuse to have a Sunday morning lime by Kay’s house, sipping coffee and enjoying one of the most spectacular views in the country. However we really did plan to do some birding. That is, before the rain started pelting down. The birds, as would be expected, for the most remained hidden somewhere during the rain, and remained fairly quiet for the rest of the dark drizzly morning.

We did however see a few birds. There were six tanager species and their cousins the bananaquits and honeycreepers on the plum tree. Some less dignified club members actually tried to compete with the tanagers for the ripe plums. However the evolutionary advantage of having wings became obvious and the birds came out the winner in that ecologic niche. The poor light did not allow us to appreciate the beauty of the small flock of Turquoise Tanagers (*Tangara mexicana*), one of my favourite birds, always a happy, chirrpy bunch.

Oh, I forgot the toucans (*Ramphastos vitellinus*). On our arrival on the balcony, while we were studying the parrots on the horizon of the main ridge, Michelle Lee pointed out three yellow specks in a tree straight ahead of us, “Channel Billed Toucans”, she says calmly. (How she see that? I wonder. Is something yuh born with?). The beautiful toucans hung around for the morning and we heard them calling regularly in the hills above the house.

There were a few woodpeckers. From the balcony, the Golden-olive Woodpecker (*Colaptes rubiginosus*) appeared for Clayton Hull’s telescope to study. On the aborted walk down the hill, we followed the sound of some fast short drumming. It was the Red-rumped Woodpecker (*Veniliornis kirkii*), a less commonly seen species. These were on a bare tree infested with tanagers, part of a mixed species flock. I never understood why a woodpecker would be part of a flock. Surely woodpecking is a solitary business? I was glad to see the Red-rumped, a bird I had not seen for some time. The barred belly and the full red crown clearly marked the male, while the female had a brown crown..

There was, of course, a flock of the ubiquitous Orange Winged Parrots (*Amazona amazonica*) in the area. We took the opportunity to study the lively plumage at close range. The beauty of this bird is underappreciated because they are so common in our country.

The intense, melodious call of the House Wren (*Troglodytes aedon*) was the one most heard on the road. The Rufous-breasted Wren’s (*Pheugopedius rutilus*) less complex call, but equally rich wren voice was also there, but he hid in the undergrowth until the jumbie bird call brought him out. We never got the antshrike out (probably the Barred Antshrike), and also the stridently calling Buff-throated Woodcreeper (*Thamnophilus doliatus*) who was quite near failed to materialize. There were many Violaceous Euphonias (*Euphonia violacea*), another of the island’s very successful species.

What about warblers? Well there was the Golden-crowned Warbler (*Basileuterus culicivorus*), who I think of as the ninja bird, because of the way they dance in to the jumbie bird call, flipping from side to side through 180 degrees as if ready for battle

(Continued on page 5)

Paramin - October 14, 2007

Feroze Omardeen

Birding Trip



(Continued from page 4)

at any moment. More interesting, even in the dim light, were the few American Redstarts (*Setophaga ruticilla*), migrants from the north who will spend the winter in those forests. As migrant warblers go, this is one of the most easily recognizable, with a bold pattern of scattered colour even in non-breeding plumage. The name "redstart" is derived from the fact that an old name for the tail of the bird is the *start*. However none of the birds showed red, they were all either females or first year males in juvenile plumage, showing yellow instead.

So what do birders do when it rains? The mist and

the drizzle through the tall trees was like "a scene from a Stephen Spielberg movie", hauntingly beautiful but pretty much birdless. So we all headed back to town to campaign for our favourite political parties, the second most fun thing in life!

References:

Hilty, S.L., 2003. Birds of Venezuela. Princeton University Press, Princeton, New Jersey 474p,



Morne Bleu - January 13, 2008

Mat Kelly

Birding Trip



About 18 of us met at the TSTT station at Morne Bleu at first light. I didn't notice a fashion contest today, amongst members (as has been previously reported). The morning was brisk. We slowly circumambulated the fenced perimeter at the station, and started our tally. We also walked down the road, and on to a few bush tracks. Birds seen at Morne Bleu were; Tropical Mockingbird, Palm Tanager, White-lined Tanager, Golden-olive Woodpecker, Gray-breasted Martin, Bare-eyed Thrush, Tropical Kingbird, House Wren, Lilac-tailed Parrotlet, Black Vulture, Silver-beaked Tanager, Bay-headed Tanager, Blue-gray Tanager, Bananaquit, Violaceous Euphonia, Blue-chinned Sapphire Hummingbird, Speckled Tanager, Yellow-legged Honeycreeper, Purple Honeycreeper, Channel-billed Toucan, Barred Antshrike, White-bearded Manakin, Rufus-breasted Wren, Rufus-breasted Hermit Hummingbird, and the high-flying Magnificent Frigate Bird.

Birds heard included; Yellow-bellied Elaenia, Bearded Bellbird, Striped-breasted Spinetail, and the Ferruginous Pygmy-Owl.

The ever-elusive Piping Guan never came to greet us today. Maybe next time!

The group next decided to move on down to Las Lapas Trace to see what was out and about. Sightings there included; Speckled Tanager, Violaceous Euphonia and American Redstart. There were a few hummingbirds high in the tree branches sitting against the brightening sky, which were never identified.

Birds heard on Las Lapas included; White-tailed Trogon, Channel-billed Toucan, and a passing group of Lilac-tailed Parrotlet.

Some interesting red florescence protruded high

(Continued on page 6)

Morne Bleu - January 13, 2008

Mat Kelly

Birding Trip



(Continued from page 5)

up in a tree. This was the flower of the tree known as "Red Hot Poker" (most commonly *norantia guyanensis* but easily classified in the genus *norantia* spp.) [Quesnel].

Also, an interesting cluster of leaves high in the canopy turned out to be an ant's nest. The nest is made by a family of ants known as Weaver Ants, which are able to pull leaves together by forming long chains with their bodies, and collectively pulling. The larva of these ants are able to produce silk which is not for used in the usual way for cocoons. Instead, worker ants carry the silk-spinning larva as if the larva were a large glue gun. The worker stimulates the larva as to when to make silk, while the worker weaves the fine silk, which can hold the leaves in a cluster, which keeps the colony safe, high and dry. I have seen these unique and interesting nests blown down, and fall to the ground, where they can be more easily examined.*

Due to the low bird numbers here, about half of the group decided to call it a day. The other half was still game, and moved back over the ridge to try our luck on La Laja Trace.

We drove La Laja almost to the end, stopping near a cool stream crossing. We walked on down the trace. Near a Trema (*Trema micranthum*) tree, we stopped. The tree was in a good position for viewing, and was fruiting, which had the interest of some birds. The thin-leaved foliage on this tree is also easy to see through. I gave my best version of the Pygmy Owl call, and we were soon rewarded. Our sightings included; Copper-rumped Hummingbird, Green Honeycreeper (male & female), Black-throated Mango Hummingbird (m & f), Tropical Pewee, White-chested Emerald Hummingbird, Red-legged Honeycreeper (m & f), Blue Dacnis (m & f), Blue-chinned Sapphire Hummingbird, Rufus-breasted Hermit Humming-

bird, Long-billed Starthroat, Bay-headed Tanager (m & f -- this was probably our most common species of the day), White-lined Tanager (m & f), and Silver-beaked Tanager. We moved on. Many of the trees here were fruiting profusely, and bird activity was extremely high. Also reported were; Hepatic Tanager, Common Black Hawk, Green-rumped Parrotlet, Tropical Parula, Black Vulture, Turkey Vulture, Tufted Coquette Hummingbird (m & f -- and good views!), White-bearded Manakin, and Cocoa Thrush. With bad sky contrast, I believe we also had a White-necked Jacobin Hummingbird. We then logged in a Gray-headed Kite, in his dark phase, "with its butterfly wings, prominent black and white checkered barring on underside of primaries and long rounded multi-striped tail," noted Robert Kong.

We walked on while hearing the sounds of; Little Tinamou, Lineated Woodpecker, Golden-olive Woodpecker, Rufus-breasted Wren, Blue-headed Parrot, Orange-winged Parrot, Bearded Bellbird, Rufus-browed Peppershrike, Bare-eyed Thrush, Channel-billed Toucan.

We came upon a very interesting wild orchid about 10 meters above ground. Feroze Omardeen climbed the tree to examine it, without disturbing the magnificent trail of brilliant yellow/orange flowers on its approximately 4 to 5 foot-long flower stalk. I took photos to later identify it as *Oncidium citrinum*, "an uncommon Bee Orchid found mainly at high elevations in Trinidad" [Kenny].

We spent some time focusing on a raptor high above, which was identified as an Ornate Hawk Eagle, "based on its large size, wing shape, pinched wings at base, long rounded tail, barring/streaking on underside of primaries and altitude of flight," noted Robert Kong.

(Continued on page 7)

Morne Bleu - January 13, 2008

Mat Kelly

Birding Trip



(Continued from page 6)

Final sightings of the day at La Laja included; Crested Oropandola, Blue-black Grassquit, Olive-sided Flycatcher, Boat-billed Flycatcher, Golden-fronted Greenlet and Ochre-bellied Flycatcher.

Since it was mentioned in two previous reports, by another writer, I made myself available for vegetarian consultations, but I had no takers. All-in-all, it was a good day of birding with most all of Trinidad's Tanagers and Hummingbirds sighted. The overall day's tally was 60 species logged.

*Subsequently, I have discovered another species of Weaver Ants on Tobago. More information from this author to come on this topic in the near future.

References

Holldobler, Bert and Wilson, Edward O., 1990, *The Ants*, Belknap Press

French, Richard, 1991, *A Guide to the Birds of Trinidad and Tobago*, Cornell University Press

Kenny, Julian, 1988, *Native Orchids of the Eastern Caribbean*, Macmillan Caribbean Publishers, Ltd.

Quesnel, Victor C. & T. Francis Farrell, 2005, *Native Trees of Trinidad and Tobago*, published by The Trinidad & Tobago Field Naturalists' Club

Quesnel, Victor C., 2008, personal communication on the TTFNC field trip to Platanal, Jan. 27, 2008



Why are there iguanas?

Christopher K. Starr

Dep't of Life Sciences, University of the West Indies ckstarr99@hotmail.com

Nature Note



The green iguana, *Iguana iguana*, is a familiar beast in much of the neotropics. It is a big, meaty beast, ostensibly very tasty, and fairly common. And that baffles me, because it really ought to be extinct.

The iguana can climb, and it can run reasonably well on the ground, but let's face it. The iguana is slow. The biggest one I have seen in Trinidad & Tobago was a male that Shane T. Ballah and I encountered on Huevos. It was so sluggish that we had to laugh when it tried ineffectually to run up the hillside. We walked right up to it with ease. Compare this to the zandoli (*Ameiva ameiva*) or especially the matte (*Tupinambis teguixin*). Now, those lizards can scamper. The matte, like the iguana, is a hefty bit of meat, but you're lucky to even get a good look at it as it streaks for cover, like a mongoose. And I very much doubt that an iguana can defend itself against anybody big enough to eat it. They can sort of

scratch, sort of bite, but I have never yet seen one that I couldn't pick up with reasonable care.

So, why are there iguanas? How in the world did they escape being hunted to extinction by those agile ocelots and high-woods dogs? And if there were never enough Amerindians here to encounter most iguanas, there are certainly plenty of Trinidadians (and their dogs) about now. Where is the Trinidadian (or dog) who won't jump at the chance to chase down and dispatch an iguana?

Now, don't get me wrong. I am very happy that we have iguanas among us. They make the world a more interesting and attractive place. I just don't see how they can possibly survive.



North Manzanilla - March 17, 2007

L.W. Doodnath

Botany Trip



This was the first trip of the Botany group since the departure of the charismatic Nicholla Johnson. The group of 23 persons completed the trip still energetic, but now more knowledgeable about our flora and natural history.

According to Anthony (1988) the name 'Manzanilla' was given to the headland by Spanish soldiers in the 18th century due to the many Manchineel trees (Euphorbiaceae) which covered the area. The fruit of this tree are like little toxic apples and hence the name, 'Manzanilla'.

Beard (1946) stated that the vegetation for the area is: towards land, the Semi-Evergreen Seasonal Forest comprising the Acurel - Moussara association with a Jiggerwood type fasciation; towards the sea, Littoral Woodland of the Dry Evergreen Forest comprising the Sea-Grape - Manchineel association and the Palmiste or Royal Palm - Balata association and other plants associated with the Windbelt Reserve.

The North Manzanilla Road diverges off the Eastern Main Road in the vicinity of the last gas station one encounters. Driving along it, felt like a peaceful Sunday drive experience, although this was a Saturday. Along the roadway we noticed cleared areas devoid of ground vegetation and accessorised with painted white stones, evidence of the handiwork of CEPEP. We parked our many cars in a large open area near the coast near to coconut trees. After a short, highly educational talk with the distribution of relevant literature by the group leader (yours truly), we were off on our floral journey.

Our first plant specimen of interest was a thicket of *Hibiscus pernambucensis* (Malvaceae) which was formerly known as *Hibiscus tiliaceus*. This name change indicating the dynamic nature of assigning names to species in botanical taxonomy (the scientific naming of plants). This plant has glands on



Tall Royal Palms with windswept *Erythroxylum havanensis* below (Photo courtesy L.W. Doodnath)

the main veins of the leaf.

The early sighting of a Cedar (Meliaceae) tree prompted an interesting discussion on comparisons of its physical traits versus that of the Hog Plum (Anacardiaceae) that are used in their identification. The Hog Plum has a rougher bark whereas that of the Cedar is lighter in colour. The trunk of the Hog Plum has a bulbous base and the Cedar has a more fruity smell when gashed. However, the Cedar trees observed here had dark, rough trunks and this was probably due to the very dry conditions. So much for that lesson.

There were Crested Oropendola (*Psarocolius decumanus*) birds in the Tantakayo trees (*Albizzia niopoides*) of the Leguminosae family. Many of their weaver type nests were hanging colonially from these trees. The Screw pine (*Pandanus* sp.) of the Pandanaceae family was also encountered. This is an introduced exotic, probably planted here ornamentally. Shane T. Ballah noted that the proposed highway to Manzanilla from Sangre Grande would be passing nearby this area. We thought that any

(Continued on page 9)

North Manzanilla - March 17, 2007

L.W. Doodnath

Botany Trip



(Continued from page 8)

impact of the highway on the vegetation would not be significant because the vegetation was already disturbed.

Several members of the Leguminosae family were observed including, Mayoc Chappelle a local shrub; Quick Stick, which has small white flowers, and pink pods; Mountain Immortelle, introduced as a shade plant for Coffee; and *Coursetia arborea* with oblong leaflets.

An encounter with a Silk Cotton tree (Bombacaceae) prompted the second interesting discussion on the comparison of its thorns with those of the Mountain Immortelle and the Sandbox tree (Euphorbiaceae). Victor Quesnel jokingly suggested using the thorns of the various trees as torture instruments. The sandbox is so named because its wood, as well as that of the Silk Cotton, was traditionally made into boxing board used in the manufacture of coffins presumably because the wood decays quickly. The fruit of the Sandbox is also a purgative.

Do you remember when you were a child, rubbing a Donkey Eye seed against the ground to make it hot, and then using it to burn people? Two different vines produce this type of seed. One produces pods that are smooth on the outside (*Dioclea*) of which there are two species: *Dioclea megacarpa* and *D. reflexa*. Then there is the *Mucuna rostrata*, with a hairy pod that is corrugated on the outside. The seeds of *Mucuna* are easily distinguished from that of *Dioclea* by the length of the hilum, which is the attachment of the seed to the pod. It is longer in *Mucuna*. *M. rostrata* is commonly known as Cow-Itch and the hairs on the pod are an irritant to the skin. This has been used to disrupt the workplace by placement of the pods in air-conditioning vents.

As we walked along spent cartridges (shells) were

seen on the ground. Dan Jaggernaut warned against collecting them since to have them in your possession is a non-bailable offence. Nobody wanted to be in jail when they could be on a botany trip.

Birds observed along the way included the Great Kiskadee (*Pitangus sulphuratus*), White-chested Emerald hummingbird (*Amazilia chionopectus*), Short-tailed Swift (*Chaetura brachyura*) and Bananaquit (*Coereba flaveola*). Several common butterflies flew by including the small Sweet Oil (*Hypothyris euclea euclea*) and Postman (*Heliconius melpomene*), as well as the occasional termite nest (*Nasutermes* sp.).

Finally, a young Moussara sapling (Moraceae) family was identified by Winston Johnson. Only one so far, but at least it was evidence of the original forest. Various strangling figs were observed, including *Ficus maxima* and *F. yoponensis*, the former having larger fruit. *F. maxima* also has wasps (Hymenoptera) associated with it which enter through openings and then develop inside its fruit.




Group members along the 'Road to Hell'
(Photo courtesy Kester Dass)

(Continued on page 10)

North Manzanilla - March 17, 2007

L.W. Doodnath

Botany Trip 

(Continued from page 9)

F. trigonata has a white sap when gashed and has very pronounced buttress roots with largish leaves. *F. nymphaeifolia* was seen strangling a Bois d'Orme (Sterculiaceae) tree. Nature is so violent.

Right after this we saw our first Royal Palm, another indication of the forest we expected to see. Hurray! Then, several more palms were observed: the Carat or Sabal (*Sabal mauritiformis*) of which there is only one species, Roseau (*Bactris major*) and Calmwell or Wait-a-while (*Desmoncus orthacanthos*), a palm with a vine like habit.

A very noticeable tree was Cutlet (*Citharexylum fruticosum*) of the Verbenaceae family, with its bark peeling in strips. We were told that you can identify lianas of the family Dilleniaceae by the sap resulting from slashing; and that you can tell their age by checking the leaf nodes on the axillary buds. We then came across one adult specimen of Moussara, followed by a stand. Double hurray, the forest as it should be. We also saw *Chionantus compacta* (Oleaceae) which is typical of dry forests.

Old cobblestones of a former road were seen. John Lum Young told us that this was a remnant of a training ground use by American soldiers to get them accustomed to the humid conditions of Pacific jungles. This path was called the 'Road to Hell'. Fittingly, we saw a cut tree limb that was suspended from a liana, so its parent tree must have gone through hell. Also observed were recent concrete square blocks, an indication of modern man making his mark? So the whole area may be going to hell in a basket made out of twine and then, we saw a man walking with a wreath of vines entwined around his head. These would probably be used to tie crabs were possibly from the Bignoniaceae or Aracaceae families.

Present were *Coccoloba latifolia* (latifolia meaning

oval) of the family Polygonaceae and also *C. cruegeri*, the latter you can tell by the size of the stipule which is found by the leaf base. It has a larger stipule. The compound leaf with opposite leaflets of the Acurel was noted. *Myrcia splendens* (Myrtaceae) could be found in the understorey. There was also a Moussara understorey with Cutlet trees.

Cockspur (*Sideroxylon persimile*) of the Sapotaceae family was observed forming the understorey, characteristically, of the dry forest. A reddish fruit was noted on one individual.

In terms of orchids, Carlyle MacMillan identified *Oeceoclades maculata*, which is thought to have been transported here by the Sahara dust. In 1950 this orchid was in Brazil; then it came to Trinidad. It is pollinated by a raindrop mechanism. Also seen was the virgin orchid *Caulathron bicornutum*. Nearby was the Tac-tac ant *Odontomachus* sp. (Formicidae), its strong mandibles can give a nasty cut.

As we approached the coast a young Balata tree followed by Carat palms were seen, typical of the expected forest. We saw the Seaside Almond (Combretaceae) and the legume *Erythrina pallida*, together with *Erythroxylum havanensis* (Erythroxylaceae), indicative of the littoral woodland. This plant is related to the coca plant (*Erythroxylum coca*) from which the drug cocaine is derived. Tall Royal Palms were seen, together with the *E. havanensis* on the not too high cliff, where the soils were clayey. It was very serene and made one feel on a natural high here.

On the descent to the North Manzanilla beach we passed the Seaside Mahoe (*Thespesia populnea*) of the Malvaceae family and with various grasses. At the bottom we found *Sesuvium portulacastrum* (Aizoaceae) family and *Ipomoema pres-caprae*

(Continued on page 11)

North Manzanilla - March 17, 2007

L.W. Doodnath

Botany Trip



(Continued from page 10)

(Convolvulaceae) in small quantities. Here we rested a while and had lunch.

On our return several individuals of Royal Palms with swollen trunks from which strange secondary roots arose were observed. This was a mystery. Could this be due to injury or to environmental conditions?

Somebody mentioned that there was supposed to be an Amerindian midden nearby but was unsure of its location. The coastal-associated lizard *Cnemidophorus lemniscatus*, was spotted when we descended to the beach and an *Anolis* sp. Was seen in the forest.

Following our return to the cars a separate visit was made to the home of one of the participants - Kayman Sagar located in Manzanilla Number 2 on Plum Road. At the back of his house there was a dried pond with Water Hyacinths ((*Eichhornia crassipes*)) of the Pontederiaceae family and also a dried gully. Within this dried gully was a large Sandbox tree and behind this a cleared area with young Silk Cotton, Caimite (*Chrysophyllum cainito*) of the Sapotaceae family and Coffee trees. Kayman explained that he was undertaking a reforestation project on his family's land.

Further up the road towards Biche along Plum Road, we could see the lighthouse atop Brigand Hill, which was quite close. Somebody had planted Pink Poui trees (*Tabebuia rosea*) of the Bignoniaceae family; however, these were burnt by a recent fire. Maybe future tree planting should include those indigenous plants that we observed in the previous area visited. Such local species should be encouraged for reforestation instead.

References

Anthony, M. 1988. Manzanilla. In: *Towns and Villages*, pp. 139–142. Port-of-Spain, Trinidad and Tobago: Circle Press.

Beard, J. S. 1946. *The Natural Vegetation of Trinidad*. Oxford: Oxford University Press.



Botany group members
(Photo courtesy L.W. Doodnath)



Strange root growth on Royal palm
(Photo courtesy L.W. Doodnath)

North Manzanilla - March 17, 2007

L.W. Doodnath

Botany Trip



Species listing of plants encountered along the trail – North Manzanilla – Botany group trip March 17 2007

Family	Scientific name	Common Name	Family	Scientific Name	Common Name
Acanthaceae	<i>Bravaisia integerrima</i>	Jiggerwood	Moraceae	<i>Ficus maxima</i>	Matapal
Aizoaceae	<i>Sesuvium portulacastrum</i>		Moraceae	<i>Ficus yoponensis</i>	
Anacardiaceae	<i>Spondias mombin</i>	Hog Plum	Moraceae	<i>Ficus trigonata</i>	
Bombacaceae	<i>Ceiba pentandra</i>	Silk Cotton, kapok	Moraceae	<i>Ficus nymphaeifolia</i>	
Combretaceae	<i>Terminalia catappa</i>	Seaside Almond	Myrtaceae	<i>Myrcia splendens</i>	
Convolvulaceae	<i>Ipomoema pres-caprae</i>		Oleaceae	<i>Chionantus compacta</i>	
Erythroxylaceae	<i>Erythroxylum havanensis</i>		Orchidaceae	<i>Oeceoclades maculata</i>	
Euphorbiaceae	<i>Hippomane mancinella</i>	Manchineel	Orchidaceae	<i>Caulathron bicornutum</i>	Virgin orchid
Euphorbiaceae	<i>Hura crepitans</i>	Sandbox	Palmae	<i>Roystonea oleracea</i>	Royal Palm, Palmiste
Leguminosae	<i>Albizzia niopoides</i>	Tantakayo	Palmae	<i>Cocos nucifera</i>	Coconut
Leguminosae	<i>Entada polystachia</i>	Mayoc Chappelle	Palmae	<i>Sabal mauritiiformis</i>	Carat, Sabal
Leguminosae	<i>Gliricidia sepium</i>	Quick Stick	Palmae	<i>Bactris major</i>	Roseau
Leguminosae	<i>Erythrina poeppigiana</i>	Mountain Immortelle	Palmae	<i>Desmoncus orthacanthos</i>	Wait-a-while
Leguminosae	<i>Coursetia arborea</i>		Pandanaceae	<i>Pandanus sp.</i>	Screw pine
Leguminosae	<i>Dioclea megacarpa</i>	Donkey Eye	Polygonaceae	<i>Coccoloba uvifera</i>	Sea-Grape
Leguminosae	<i>Dioclea reflexa</i>	Donkey Eye	Polygonaceae	<i>Coccoloba latifolia</i>	
Leguminosae	<i>Mucuna rostrata</i>	Cow-Itch	Polygonaceae	<i>Coccoloba cruegeri</i>	
Leguminosae	<i>Erythrina pallida</i>		Rubiaceae	<i>Coffea arabica</i>	Coffee
Malvaceae	<i>Hibiscus pernambucensis</i>		Sapotaceae	<i>Manilkara bidentata</i>	Balata
Malvaceae	<i>Thespesia populnea</i>	Seaside Mahoe	Sapotaceae	<i>Sideroxylon persimile</i>	Cockspur
Meliaceae	<i>Trichilia pleeana</i>	Acurel	Sterculiaceae	<i>Guazuma ulmifolia</i>	Bois d'Orme
Meliaceae	<i>Cedrela odorata</i>	Cedar	Verbenaceae	<i>Citharexylum fruticosum</i>	Cutlet
Moraceae	<i>Brosimum alicastrum</i>	Moussara			



Exotic Vertebrate Species in Trinidad and Tobago

Hans Boos

12 Blue Basin Gardens, Diego Martin. Jan. 2008

Feature



Over the past centuries exotic species of animals have been imported to Trinidad and Tobago.

The first category of animals was the usual domestic and agricultural mammals and birds. Horses, donkeys, mules, cattle, sheep, goats, pigs, dogs, cats, chickens, ducks, geese, turkeys, canaries, tortoises and pigeons were intentionally imported to satisfy the needs of the existing population of humans whether they were indigenous Amerindians or colonial settlers from all parts of the world. Experiments with the introduction of Aru Island Birds of Paradise, *Paradisaea apoda* and Venezuelan deer, *Odocoileus virginianus* in the nineteenth century were unsuccessful, as the populations were certainly extirpated by the middle of the twentieth century.

Inadvertently, with any influx of people from the seafaring routes of the world, there were introductions of the usual two species of rat, the Norwegian, *Rattus norvegicus*, the Black *Rattus rattus*, and the Common House mouse *Mus musculus*.

With a settled affluent population and a social advancement that could afford to expand into the esthetics of living comfortably, and the need for a Zoological garden being fit for the times, some exotics were imported to satisfy this need.

Small menageries were set up and are recorded else where, but oddities like Australian wallabies, South American Monkeys of several species were kept and displayed to a curious public.

Visiting sailors were often eager to bring back exotics for a price, and small zoos were displaying animals from Venezuela and the Guianas in the early part of the twentieth century.

With the establishment of the Emperor Valley Zoo, the list of exotics imported to fill this facility

expanded to include, lions, jaguars, tigers, American bison, monkeys, mandrills, baboons, zebras, red deer, ostriches, crocodiles, several species of cage birds and a variety of snakes and lizards from other regions of the world.

However there were several people who wished to enhance their reputations or their private collections with exotics, and thus fuelled the smuggling trade in animals, mainly from South America.

Capybaras, jaguars, tapirs, otters, deer, ocelots, monkeys, thousands of whistling finches, toucans and a myriad of parrots and macaws began to appear on the pet market scene, and there was one man living in the Maracas waterfall area who had a West African Diana monkey *Cercopithecus diana*, which he would never disclose how he had acquired. One wealthy lady brought her pet gibbon when her husband was transferred from his post in Singapore to Trinidad.

Permits to import other pet species were granted by the authorities for scientific and recreational purposes, and these included white rats, mice, hamsters, guinea pigs, gerbils, several species of whistling finch, and aquarium fish, and in one case, snakes.

The more exotic an animal appeared or was portrayed in books and the media, the demand at times exceeded the good sense of keeping such an inappropriate pet in captivity. This was in some cases to mimic what was seen to be happening in other parts of the world where private citizens were allowed to keep exotics such as lions or leopards as pets, and the growing population of reptile fanciers there, had its mirror image here in Trinidad, for presently there is a noticeable absence of any snake keepers in Tobago.

The question therefore has to be asked. What im-

(Continued on page 14)

Exotic Vertebrate Species in Trinidad and Tobago

Hans Boos

12 Blue Basin Gardens, Diego Martin. Jan. 2008

Feature



(Continued from page 13)

pact would or could an exotic species have on our environment should it escape and, like what has happened in Florida, set up a breeding colony in our island?

The only case that comes to mind is the introduction of the fresh water fish, the Tilapia, to our rivers and lakes.

In that there never was a quantitative base line study of the local fresh water fauna, pre Tilapia escape, for comparison to the present situation, it is impossible to accurately tell what impact this fish has had on the existing fauna. Comparisons between the earlier and most recent studies or lists of fresh water fish, give no indication of loss of species due to introductions of exotics which have included a deliberate release of South American Splash Tetras, *Copenia arnoldi*, Pencil Fish, *Nannostomus spp.*, and the escape of several species of live bearing aquarium fish from a breeding facility in Valencia. Only guesses can be made as to what might have been the case had there been no Tilapia, and using comparisons from a similar biota, say nearby Venezuela, where the fauna is essentially the same, could point to the possible impact, whether positive or negative.

But a new factor has entered the picture.

For the past twenty years, the Government has facilitated the keeping of wildlife in an effort at "wildlife farming" ostensibly to take the pressure off the species hunted in the legitimate hunting season.

This has allowed many breeders who in fact were maintaining mini zoos, to import exotics to boost their collection's attraction to the public and these "zoo's" animals were often used in agricultural and tourism displays

Permits were also granted to import exotic and showy reptiles, and soon large Asiatic and African pythons, including some rare and pricey albinos, as well as a cobra or two, were to be seen at the circus-like atmosphere of these displays, where snake handling and display are accepted as part of the entrance fee paid by the public.

Unfortunately, the keeping of reptiles, throughout the world, seems to attract a type of loner personality, who seeks to enhance his image, status, and charisma, and either legally or in many cases by whatever means possible, they acquire an assortment of snakes, often some of the most deadly and dangerous in the world, all this unknown to, or ignored by, the authorities.

There are many cases in the Americas and Europe of the owners of these dangerous collections being killed while attending to the animals, either by being bitten by a venomous snake or constricted and killed by a large python.

Escapes of large pythons and cobras and a host of other exotics, which in many cases have set up breeding populations in the wild in Florida, pose a serious threat not only to the human population but to the natural fauna of the State.

The lack of the local authorities in Trinidad of the personnel, of the knowledge, or the will to control or to monitor the existing permitted, much less the illegal, population of exotic reptiles in the island, leads to the inevitable conclusion that eventually there may be a number of these exotics in the wild environment, especially now that there has been a breeding, hatching and distribution for sale of exotic pythons here.

In considering whether these escapees pose any threat to the population of Trinidad it is useful to remember that unfortunately there is a propensity

(Continued on page 15)

Exotic Vertebrate Species in Trinidad and Tobago

Hans Boos

12 Blue Basin Gardens, Diego Martin. Jan. 2008

Feature



(Continued from page 14)

to kill any snake on sight, though a fifteen or twenty foot python would give the average person pause and probably will lead to a reported sighting to the usual agencies that recently have been fielding many such calls to remove unwanted reptiles from private and public premises. This would hopefully lead to the retrieval of the escapee and safe confinement in our local Zoo.

Fortunately there have been only a couple of venomous snake imports into Trinidad, some to the Zoo as legitimate imports, and though it is not impossible for an escape or theft and eventual escape or release, it is unlikely that the small numbers involved would pose any threat; nor would the other small number held by private, legitimate and permitted importers.

But, with the increasing popularity and demand for exotic pets of all kinds, there is a thriving black market and underground supply of animals coming in from the Venezuelan mainland, and it is only a matter of time before there will be an incident involving a dangerous exotic animal and the population of this island, unless the authorities take a serious view to control what is already here and what might be brought in legally or illegally.

Over the years escapes of pet monkeys and the difficulties of their recapture or immobilization has been a grave problem for the authorities, or volunteers from concerned N.G.Os. It has long been suspected that monkeys confiscated from the illegal pet trade have been released into the Chaguaramas area, as there is a flourishing colony of what certainly looks like Tufted Capuchin Monkeys *Cebus apella*, a species not native to Trinidad

The suggestion has been made for the safety of all, that all exotics should be registered with the wildlife authorities; all permit applications should be checked by experts as to the suitability of the de-

sired animal to be kept by the applicant; routine checks as to the status of each applicant's collection; legislation to outline the conditions under which the animals are to be imported and kept; and yearly returns by the owners of the status of their animals to the central controlling agency.

But there is a broader threat that should be considered before any permits are approved or illegal animals are detected or seized, and this is the possibility of these smuggled or imported animals carrying diseases which could impact, not only on the human population, but also wipe out the population of domestics, whether kept to supply food or as pets in the home. The economic impact will be disastrous. It is known that several strains of influenza and other virulent viruses are vectored by wild bird and mammal populations. There are West Nile Virus, Bird Flu and Yellow- Fever, to name a few. Veterinary circles will be more familiar with the potential threat of unrestrained and unchecked imports of exotics from ports that have little or no health facilities to monitor this type of danger.

Any illegal imports should be immediately seized and impounded and either euthanised or given to the Zoo for quarantine, if there are facilities to hold and display the animal. Penalties for offenders, who are detected and convicted of illegal import or possession of exotics off the national register, should include forfeit of their present collection.



Montserrat: A Naturalists Surprise

Reynold C. Boyce

Feature



On my agenda for photo-documenting Caribbean flowering plants, the last remaining CARICOM island-state not investigated was Montserrat. Because of the recent volcanic eruptions and the subsequent devastation of the southern half of the island (including Plymouth, the capital) I assumed that my major difficulty would be getting around the rest of the island. But I was unprepared for what followed on the trip my wife and I took last September (2007).

Actually, getting around was relatively easy: given the regularity of local buses, the hospitality of my hosts and the general kindness of locals. However, getting into Montserrat, itself, was one of the major problems. Only one commercial carrier is operational, a small St Martin-based airline called WIN AIR. Oddly, it is neither registered on LIAT's itinerary nor that of any Trinidad travel agent. So to get to Montserrat one has to fly into Antigua, go to Win Air's check-in desk at Vere Bird International Airport and negotiate a flight time and fare there and then. The traumatic consequence of which is that though we were able to get a flight into Montserrat that same day, the cost from Antigua to Montserrat (return) is almost as much as the T.&T. to Antigua leg. Then, once at Gerald's airport, we had to rely on airport taxi drivers to locate an affordable and available Guest House. (There is only one hotel and about 8 Guest Houses all of which cater mainly for the pound-sterling budgets of the mostly British tourists and expatriates.) The net effect is that going to Montserrat is a nerve racking and expensive proposition from a Trini's perspective.

However, once settled-in, the island turns out to be a naturalist's wonder. The drive alone from the airport to Woodlands – where our Erindell's Guest House was situated – is like a mini Arima-Blanchisseuse extravaganza with hills and valleys clad with rain forest greenery and mountainous hairpin corners exposing breath-taking views of



A devastated pathway leading from the volcano.
Photo courtesy Reynold Boyce

the rugged coastline.

One of the unique geographic features of Montserrat is the existence of numerous *Ghauts* (pronounced guts). These are channels originally carved down hill-sides by volcanic lava flows. These passages, being sometime in heavy wooded areas, form a micro-climate for seemingly specialized plant and fungal growth; while offering naturally cut trails to navigate and explore the surrounding hillside. Many *ghauts* have their own names and are inscribed on official tourist maps. Erindell had its own *ghaut* behind the Guest House buildings and I wasted no time in exploring it on mornings before breakfast. One quaint *ghaut* about midway between the villages of Woodlands and Salem was *Runaway Ghaut*. This *ghaut*, doubling as a gully-way with its crystal-clear stream, offered some very photogenic ferns, shrubs and herbs. One such example was a clump of the monocot: *Xiphidium caeruleum*, which was in such radiant bloom that one would easily mistake it for a garden-cultivated herb. Commonly called *Walk Fast*, (because the plant is known for rubbing on the feet of infants learning to walk) I had previously documented it (during TTFNC's Canari Bay trip

(Continued on page 17)

Montserrat: A Naturalists Surprise

Reynold C. Boyce

Feature



(Continued from page 16)

through the Moruga forest) in a much less luxuriant state.

A stop of interest was the National Trust, an NGO dedicated to cultivating native plant species from green-house seedlings onto the surrounding Olveston estate. The Trust also functions as a museum and an institute for the display and research of Natural and Social History artifacts. My contact at the botanic garden area was a character commonly known as *Moppii* (Mr. Philemon Murruin) who acted as a repository of knowledge of the natural history of the island. *Moppii*, who works as a gardener during the weekday and a trail guide on weekends, lectured us on the location and types of the many wild-life trails, the types of endemic plants (of which there are 3 to 4 species identified locally) and the common trees of the island, many of which are still flourishing despite being periodically covered by volcanic ash. In fact, later that day I encountered some majestic tree specimens on a steep hill-side hike - some of which had huge, extensive buttressing-roots.

Donna was another friendly staffer at the Trust, who was stationed at the Social History section. One interesting aspect of her informal lecture (we caught her on her lunch break) was the role of the Irish settlement in the early history of Montserrat. Many Irish families contributed, in no small way, to the national patrimony – including the donation of the Olveston estate that houses the National Trust. Hence even though African people are predominant on the island – like the rest of the Eastern Caribbean – with carnival mas-playing and calypso-singing high on the cultural calendar, yet St Patrick (the patron saint of Ireland) is commemorated with a week of activities culminating with St Patrick's Day as a public holiday.

One of the self-guided trails recommended by *Moppii* was "the Cot" just around the corner from

the Trust (in Salem). This well maintained hilly trail leads to the ruins of the home of the Sturge family (also Irish) almost 1000 feet above sea level. En route, many interesting shrubs and trees were evident – with larger tree specimens on the road side being labeled with their common and biological names. Our *Naked Indian* tree (*Bursera simaruba*) - locally called *Sweat Gum* or *Gum Bark* - is one of the more prevalent tree species on the island and is represented on "the Cot" by a magnificent specimen as is the *Locust/Stinking Toe* tree (*Hymenaea courbaril*) and multiple clumps of a giant *Philodendron*-looking species (*Araceae*-family) locally called *Elephant Ears*.



An image of 2 majestic trees with their buttress-roots
Photo courtesy Reynold Boyce

(Continued on page 18)

Montserrat: A Naturalists Surprise

Reynold C. Boyce

Feature



(Continued from page 17)

Another special interest of mine, developed since visiting the different Caribbean islands, is the tracking of *Anolis* lizards. Separate (endemic?) species seem to occur in each sizable island. These common tree lizards are very photo-friendly and easy to document as they perch on garden shrubs and cultivated trees around inhabited areas. However, in Montserrat the recorded species, *Anolis lividus*, was nowhere to be found around the Erindell's garden, the Trust or relevant roadside vegetation. On the other hand, local *Zandolee* ground lizards (*Ameiva* spp.) were very prevalent, active and excessively large. Could they be somehow suppressing the population of *A. lividus* or was the latter a casualty of the numerous volcanic larval ash flows? However, on a visit to Woodlands Bay, there amidst the branches of the ever-present Seaside Mahoe (*Trespesia populnea*) were a fair number of sprightly specimens of *A. lividus*. The next day, on visiting the northern fishing village of Carr's Bay, a few more elusive specimens were

again seen on branches of Seaside Mahoe and amidst relics of an old colonial fort right on the beach itself.

A visit to Montserrat would not be complete without paying homage to the mighty Soufriere Mountain in all its fiery fury. We were fortunate, the very evening of our arrival, to be taken to its base by our friendly and enthusiastic volcano-monitoring host, Lou Spycalla. (The base houses a spanking new Volcano Observatory: fully equipped with high-tech devices and staffed by an international team of volcanologists.) According to Lou, that day offered a rare cloud-less viewing of the summit spewing its steamy guts: a welcoming and exciting site for curious visitors and photo-hungry enthusiasts. However, below the spectacle and extended inland for many kilometers stood a ghostly, ash-covered lake of devastation: a reminder of the fragile glory of human civilization.



Management Notices



Special thanks to Matt Kelly for donating the following articles to the Club's library:

Beard, J.S., 1944, "The Natural Vegetation of the Island of Tobago, British West Indies", Published in *Ecological Monographs*, Vol. 14, No. 2, (copy - 28 pages)

Beebe, William, 1952, "Introduction to the Ecology of the Arima Valley, Trinidad, B.W.I.", Published in *Zoologica*, Department of Tropical Research, New York Zoological Society, (copy - 32 pages)

Dinsmore, James J., and Richard P. French, 1969, "Birds of St. Giles Islands, Tobago", Reprinted from *The Wilson Bulletin*, Vol. 81, No. 4, pp 460 - 463 (copy - 5 pages)

Hardy, Dave, c. 1980, "Tobago: The Forgotten Island", Published in *Naturalist Magazine* (copy - 14 pages)

Hardy, Jerry David, Jr., 1982, *Biogeography of Tobago, West Indies, With Special Reference to Amphibians and Reptiles: A Review*, Published in the *Bulletin of the Maryland Herpetological Society*, Volume 18, No. 2, (copy - 142 pages)

Sanderson, Ivan T., 1966 (2nd edition), An excerpt from *Caribbean Treasure*, Pyramid Books (copy - 79 pages)

Worth, C. Brooke, 1967, *A Naturalist in Trinidad*, J. B. Lippincott Co., Philadelphia, 291p, hardcover

New members; Volunteers; Publications

Management Notices



New and Returning Members

The Club warmly welcomes the following new members:

Ordinary members: David Anthony Marquez, Gina Quash, Bonnie Tyler, Melsher Snaggs

Junior member: Sean O'Brian

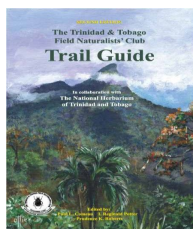
VOLUNTEERS/ASSISTANCE

Volunteers are required to assist in the following:

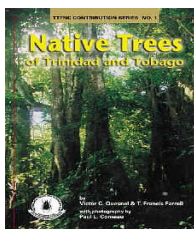
- Typing of an index for the Quarterly Bulletin covering 16 issues for the period 1986 to 1988.
- Becoming a part of the newly formed Environmental Group. Interested persons are asked to contact the Secretary.
- Assisting the Club in finding a permanent location to conduct our business and house our historic records and materials

PUBLICATIONS

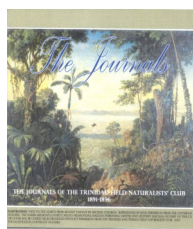
The following Club publications are available to members and non-members:



The TTFNC
Trail Guide
Members =
TT\$200.00



The Native
Trees of T&T
2nd Edition
Members =
TT\$100.00



Living world
Journal 1892-
1896 CD
Members =
TT\$175.00



Living World Journal 2007
Living World Journal back issues
Members price = free



MISCELLANEOUS

The Greenhall Trust

Started in 2005, in memory of Elizabeth and Arthur Greenhall, dedicated artist and zoologist respectively, the Trust offers financial assistance to aspiring artists and biologists (in areas of flora and fauna) in Trinidad and Tobago. Full details are available on their website:

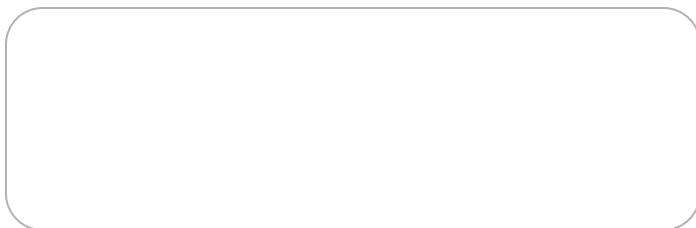
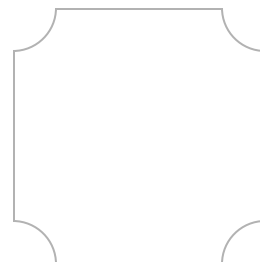
<http://www.greenhallstrust-wi.org/link.htm>

Club Polo Jerseys

Available Sizes: medium

Colours: Kahki and green

Costs: TT\$50.00



NOTES TO CONTRIBUTORS

Guidelines for Articles and Field trip reports:

Font Type: Times New Roman
Font Size: 12 point
Maximum Length: 1,750 words (approx. 3 pages unformatted)
Photos: JPEG, BMP, PICT, TIFF, GIF

Do **NOT** place images into the word processing files.
Information on the image content must be provided where possible.

Submission of electronic copies can be made to the editor shane.ballah@gmail.com. Or to ttfn@wow.net.tt.
Hard copies can be delivered to the editor or any member of the Management Committee.

Deadline for submission of articles for the 2nd Quarter 2008 issue of the Bulletin is **June 9 2008**. Please note that all field trip reports for this quarter must be in by the deadline.



What are these strange items?
If you know
Contact the Editor

Management Notices



A reminder to members that the Overseas trip to Venezuela including optional trips to the Orinoco delta and Macuro-Carpe-Araya is on and bookings (inclusive of payments) close May 5th.
The Macuro-Carpe-Araya segment has had no takers to date so unless we hear quickly this will be cancelled.
Limited space is available for the Orinoco trip.